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PAPPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO. 09/902,736 07/10/2001 Avi Ashkenazi P1618P2C45 1517

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02/25/2003

EXAMINER

KEMMERER, ELIZABETH

ART UNIT PAPER NUMBER

1646.

DATE MAILED: 02/25/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)	
		09/902,736	ASHKENAŽÍ ET AL.	
	Office Action Summary	Examiner	Art Unit	
	,	Elizabeth C. Kemmerer, Ph.D.	1646	
The MAILING DATE of this communication appears on the cover sheet with the correspondence address				
Period for Reply				
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).				
Status				
1)[				
2a)[_	,	is action is non-final.		
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.				
Disposition of Claims				
4)⊠	Di⊠ Claim(s) <u>39-44</u> is/are pending in the application.			
	4a) Of the above claim(s) is/are withdrawn from consideration.			
5)	Claim(s) is/are allowed.			
6)⊠	Claim(s) <u>39-44</u> is/are rejected.			
7)	Claim(s) is/are objected to.			
8) Claim(s) are subject to restriction and/or election requirement.  Application Papers				
• •	The specification is objected to by the Examine	 •	•	
10)⊠ The drawing(s) filed on 10 July 2001 is/are: a)⊠ accepted or b)□ objected to by the Examiner.				
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).				
11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner.				
If approved, corrected drawings are required in reply to this Office action.				
12) The oath or declaration is objected to by the Examiner.				
Priority under 35 U.S.C. §§ 119 and 120				
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).				
a) All b) Some * c) None of:				
	1. Certified copies of the priority documents have been received.			
	2. Certified copies of the priority documents have been received in Application No			
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.				
14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).				
a) ☐ The translation of the foreign language provisional application has been received.				
15)⊠ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.				
Attachment(s)				
2) 🔲 Notic	ce of References Cited (PTO-892) ce of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO-1449) Paper No(s) 4	5) Notice of Informa	ry (PTO-413) Paper No(s) I Patent Application (PTO-152)	

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#### **DETAILED ACTION**

# Status of Application, Amendments, And/Or Claims

The preliminary amendments of 10 July 2001 (Paper No. 8) and 27 August 2002 (Paper No. 9) have been entered in full. Claims 1-38 are canceled. Claims 39-44 are under examination.

The application is in compliance with the sequence rules, 37 CFR 1.821-1.825.

## Priority given to some parent cases but not others:

According to the priority statement of 27 August 2002, Applicant claims priority to several U.S. non-provisional applications, PCT applications and U.S. provisional applications. Based on the information given by applicant and an inspection of the patent applications, the examiner has concluded that the subject matter defined in this application is supported by the disclosure in U.S. patent application serial number 09/665350, filed 18 September 2000; PCT application PCT/US00/04414 (published as WO 200104311 A1) filed 22 February 2000; and PCT application PCT/US98/19330 (published as WO 199914328), filed 16 September 1998 but is not supported by any of the others for the following reasons. All of the applications disclose the DNA and amino acid sequence of PRO331. However, only the three priority applications listed above disclose an enabled use for PRO 331, namely, that it inhibits VEGF stimulated proliferation of endothelial cells or induces apoptosis in endothelial cells or induces and immune/inflammatory response. Accordingly, the subject matter defined in claims 39-44 has an effective filing date of 16 September 1998.

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Should the applicant disagree with the examiner's factual determination above, it is incumbent upon the applicant to provide the serial number and specific page number(s) of any parent application filed prior to 16 September 1998 which specifically supports the particular claim limitation for each and every claim limitation in all the pending claims which applicant considers to have been in possession and fully enabled of prior to 16 September 1998.

## Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 39-44 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 39-43 are directed to antibodies that *bind* PRO331, whereas claim 44 is directed to an antibody that *specifically binds* PRO331. Neither the claims, the specification, nor the analogous art provide unambiguous definitions for "binds" and "specifically binds" such that the difference between the terms can be ascertained by one skilled in the antibody art. Therefore, the metes and bounds of all f the claims cannot be determined.

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the

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art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 42 is rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for the claimed antibody wherein the recited fragment binds PRO331 (i.e., the sequence of SEQ ID NO: 292), does not reasonably provide enablement for the claimed antibody wherein the recited fragment is not required to bind PRO331. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to use the invention commensurate in scope with these claims.

The factors considered when determining if the disclosure satisfies the enablement requirement and whether any necessary experimentation is undue include, but are not limited to: 1) nature of the invention, 2) state of the prior art, 3) relative skill of those in the art, 4) level of predictability in the art, 5) existence of working examples, 6) breadth of claims, 7) amount of direction or guidance by the inventor, and 8) quantity of experimentation needed to make or use the invention. *In re Wands*, 858 F.2d 731, 737, 8 USPQ2d 1400, 1404 (Fed. Cir. 1988).

The claim is drawn to an antibody that binds to the polypeptide of SEQ ID NO: 292 which is an antibody fragment. While one of skill in the antibody art knows how to make fragments of antibodies, it is not readily apparent how to use the fragments. Not all fragments will bind the antigen recognized by the full-length antibody. The specification does not teach or suggest how to use antibody fragments that do not bind PRO331 of SEQ ID NO: 292. Thus, the claim encompasses an unreasonable number of inoperative antibody fragments, which the skilled artisan would not know how to use.

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For these reasons, which include the complexity and unpredictability of the nature of the invention and antibody art, the limited working examples of PRO331 polypeptide, the lack of direction or guidance for using antibody fragments that do not bind PRO331, and the breadth of the claims for structure without function, it would require undue experimentation to use the invention commensurate in scope with the claims.

The following amended claim would not be rejected under 35 U.S.C. § 112, first paragraph: "A fragment of the antibody of claim 39, wherein said fragment binds to the polypeptide shown in Figure 104 (SEQ ID NO: 292)."

### Conclusion

No claims are allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elizabeth C. Kemmerer, Ph.D. whose telephone number is (703) 308-2673. The examiner can normally be reached on Mon. - Thurs., 6:30 to 4:00, and alternate Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yvonne L. Eyler, Ph.D. can be reached on (703) 308-6564. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and (703) 872-9307 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0196.

Clyaber C Kemmeur

ECK February 13, 2003

ELIZABETH KEMMERER PRIMARY EXAMINER